Flight Plan

14th Annual Northwest Aviation Conference and Show a Big Success

by Brian A. Holmes, Chief Pilot

In the motion picture *A Field of Dreams,* the recurrent voice/theme was "if you build it, they will come!" For over a year those of us privileged to be involved in this annual aviation event wondered and worried. After an eight year run at the Tacoma Dome it became necessary to move to a new location. Unfortunately there is no suitable location available on an airport. Great places like the Seattle Convention center are nice, but expensive. Additionally difficult to get to and parking is at a premium and expensive. Therefore the logical choice was the Western Washington Fairgrounds in Puyallup.

For over a year our recurrent nightmare was *if we move, will they come?* This past February you answered the question for us. You came, and you came, and then even more of you came. Our attendance for the two days was approximately 16,000 aviation enthusiasts. All the sport aviation seminars were packed, large audiences filled the main auditorium, and people by the droves visited the enlarged aviation trade show.

From remarks made to us by the trade show venders, the various speakers, and you the aviation community, we are pleased to report the show was a large success and you liked the move.

We did goof and we apologize: The weather was outstanding and record numbers of you chose to fly in to Pierce County (Thun Field) Airport. We really goofed and underestimated the number coming in. We were simply not prepared. A number of pilots and passengers had to wait an hour or more for the ride to the show. We can't undo our mistake for this last show, but I can guarantee you we will have extra vehicles and a *published* schedule for rides next year. We are sorry and we thank you for understanding.

Special thanks to our partners who help make this show a reality. The show is a partnership between us, the FAA Seattle FSDO (especially Mr. Scott Gardiner Aviation Safety Program Manager), the Washington Aviation Association, and the General Aviation News & Flyer. Trust me when I tell you a show of this magnitude takes a lot of effort, coordination and cooperation. We are proud of this partnership. ■

Both kids and adults enjoyed trying out the pilot's seat in this search and rescue helicopter sitting in front of the fairground's main building. It was flown in and wheeled into place. Photograph by Gerry Rasmussen, WSDOT.

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1997 Training and Education Opportunities

These are the opportunities scheduled to date for 1997, all are subject to change. Check our home page at **www.wsdot.wa.gov/aviation**, for updates.

Search and Rescue

April 19-20, 1997	Mission Aircrew Course Ramada Inn, Clover Island	Tri Cities
April 26-27, 1997	Mission Aircrew Flight Training	Spokane
May 2-4, 1997	Practice Search	Walla Walla
May 31-June 1, 1997	Mountain Search Pilot Training Wings of Wenatchee	Wenatchee
June 20-22, 1997	Mountain Flying Clinic Wings of Wenatchee	Wenatchee
July 19-20, 1997	Mission Aircrew Course	Western Washington
August 15-17, 1997	Practice Search	Western Washington
August 30-31, 1997	Mission Aircrew Flight Training	Western Washington
September 13-14, 1997	Mission Management Course	Eastern Washington
Prerequisite: Must have already taken Mission Aircrew Course.		
October 11-12, 1997	Mission Aircrew Course	Spokane
October 24-26, 1997	Practice Search	Wenatchee
November 15-16, 1997	Mission Management Course	Western Washington
Prerequisite: Must have already taken Mission Aircrew Course.		

Flight Instructor Revalidation Clinics

Must be a Washington State registered pilot.

September 13-14, 1997	Spokane – Ramada Inn
November 1-2, 1997	Seattle – NOAA Auditorium, 7600 Sand Point Way N.E.
January 17-18, 1998	Tacoma – Executive Inn, Fife

Flight Plan

is an official publication of the Aviation Division of the Washington State Department of Transportation. It is designed to inform members of the aviation community and others interested in aviation, of local developments in aviation and aviation facilities and to keep readers abreast of national and international trends in aviation.

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Checkout our home page at
http://www.wsdot.wa.gov/aviation
for up-to-date information.

Training and Education Opportunities
Registration Form

To register for a training or education clinic, either complete and return this form to the Aviation Division or call toll-free 1-800-552-0666 (in Seattle, 764-4131). *A confirmation notice will be mailed to you. Note: You MUST bring the confirmation notice to the clinic for admission.*

I wish to attend the _____ clinic in _____ on _____

Name, as it appears on your FAA Certificate _____ CFI Certificate Number _____

Address _____

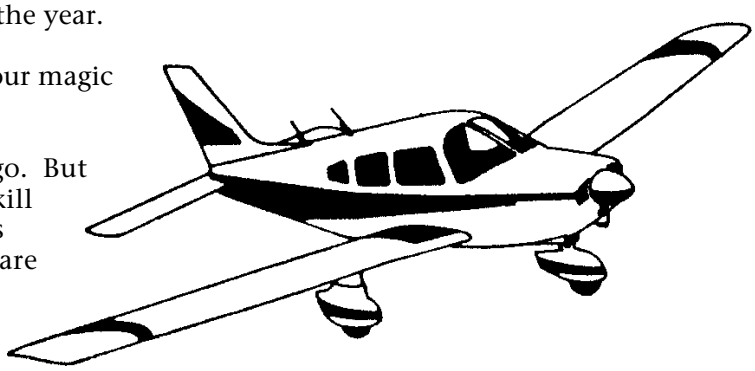
City _____ Day Phone Number _____

State/Zip Code _____ Date _____

Spring Time Flying

by Brian A. Holmes, Chief Pilot

The long cold winter is finally behind us. With the passage of seasons the yearning to fly again stirs in all of us. What a great time of year to soar over the picturesque Northwest! There are probably more $100 hamburgers in the spring than any other time of the year.



Great! Roll out the airplane! Let's climb aboard our magic carpet, feel free and let our spirits soar.

Your mind is more than willing to cut loose and go. But is your aircraft ready? Is your knowledge and skill level ready for the flight? You do need to assess your aircraft and your skills and make sure you are really ready.

The aircraft in most cases has been sitting all winter. You need to check the following:

- Is the aircraft in annual?
- Has winter weather caused any structural problems, snow or ice damage?
- Has a living creature (birds, rodents, etc.) decided to homestead in your aircraft? They usually nest where you *don't* look on a preflight.
- Has the weather deteriorated your tubing, hoses, tires etc.
- Has some creature been gnawing on your wiring?
- Has the weather caused condensation and possible contaminants in your fuel tank?

The idea is that winter has been harsh on your aircraft. We need to take a little extra time and give the aircraft a really thorough going over.

With the aircraft now airworthy, how about you? Are your skills rusty? Is your Biennial Flight Review still valid? Are you proficient for soft field landings/takeoffs (rainy spring)? Are you ready to deal with crosswind landings and take offs? Are you weather wise to know that spring weather can change rapidly?

If you choose to ready yourself, spend some extra time working on basics. Remember if you have not flown within the last 90 days ***no passengers*** until you meet current requirements (3 landings and take offs and if done at night, full stop).

This would certainly be a good time of the year to grab your favorite CFI and have them help remove some cobwebs. Other great alternatives include the Pilot Proficiency Program (Wings Program) – the Washington Pilots Association has a number of them scheduled around the state.

Enjoy your spring fling, just make sure you're ready. ■

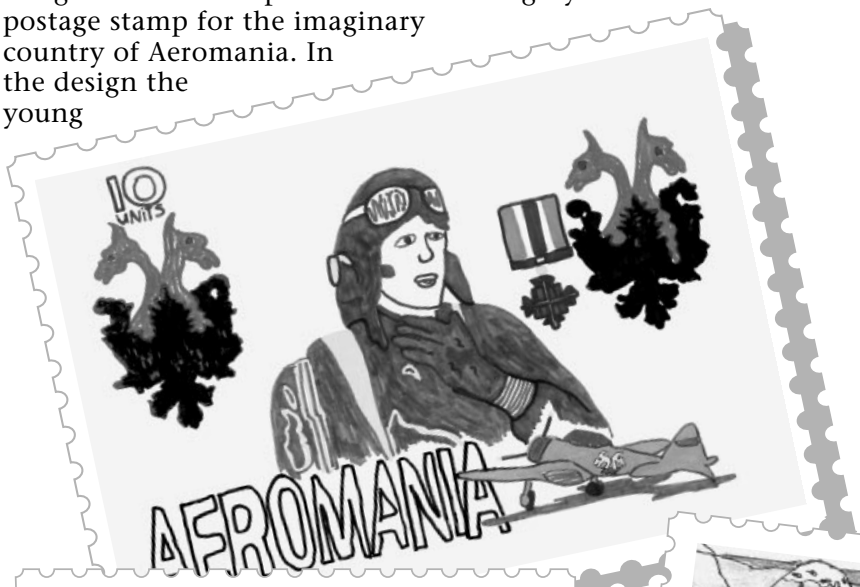
Art Contest Gets Aviation "Stamp" of Approval

by Bill Brubaker, Director, Aviation Division

More than 82 aspiring young artists put brush to paper in the 1997 International Aviation Art Contest, sponsored annually by the National Aeronautic Association, National Association of State Aviation Officials and the Federal Aviation Administration. As a member of the National Association of State Aviation Officials, the Department of Transportation's Aviation Division was the official State sponsor and administered the program.

The students, who competed in three age groups, were asked to design an aviation-space themed postage stamp for the imaginary country of Aeromania. In the design the young artists were required to have an aviation or space theme, the name of the imaginary country and a monetary value of ten units.

The three first place winners for Washington State were **Curtis Ashby** (top) from Maple Lawn Elementary school in Sumner in the six to nine year old category. In the 10 to 13 year old category the first place winner was **Rowen Tych** (far right) from Riverview Multiage School in Duvall and **Chris Loper** (right) from Tacoma's Curtis Junior High won the 14 to 17 year old category.



In addition three runners-up were also selected. They were **Tiffany Choe** from Cedar Way Elementary in Mountlake Terrace, **Mary Petrich-Guy** from Tacoma's Curtis Junior High and **Sabel Pharmer-Walsh** from Riverview Multiage School in Duvall.

In addition to receiving a certificate and recognition from the State, each winner's first place entry will advance to the national competition in Washington D.C. where a national first place winner and two runners-up will be selected from the three age groups. They in turn will advance to the gold, silver and bronze medal competition, the judging of which takes place in Switzerland.

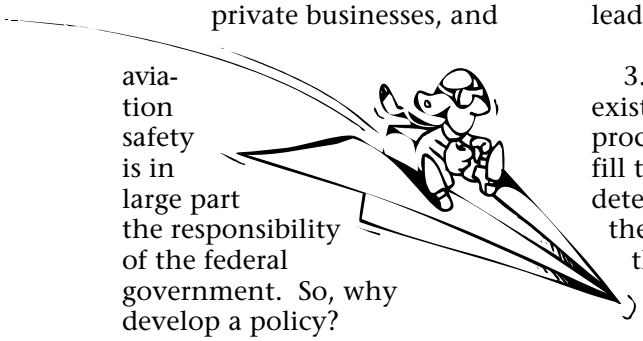
The Aviation Division's Randi Christenson, who coordinated the state competition, was pleased with the results and acknowledged the assistance of Scott Gardiner of the FAA, Donna Wilson and Chris MacSpadden.

Visit our home page to see our winners in color! **http://www.wsdot.wa. gov/aviation**

The Director speaks out...

Bill's Column

The Washington State Transportation Commission is sponsoring the development of a State Aviation Policy which identifies issues challenging our air transportation system and focuses on the issues facing our airports. Airports are unique in the sense that they are mostly owned by local government while aviation services are, for the most part provided by private businesses, and aviation safety is in large part the responsibility of the federal government. So, why develop a policy?



The development of a State Aviation Policy will help us understand the gaps which may exist between local, state, and federal programs. To accomplish this an Aviation Advisory Committee was created to provide information to the Transportation Commission. The advisory committee is comprised of representatives from the Washington Pilots Association, Aircraft Owners and Pilots Association, fixed base operators, FAA, small and large airport sponsors, ports, cities, counties, legislators, airlines, business and community representatives, transit and freight providers, and regional planning organizations.

Also an integral part of the committee are Transportation Commissioners Aubrey Davis and Tom Green, who in their instructions assured the committee that:

1. The policy development process ***does not*** amend our current service to you, our customers, in meeting the needs of general aviation;

2. The process ***does not*** seek an additional role for the state. The process identifies the gaps, the state interest in the gaps and determines a process that would lead to filling those gaps.

3. When a recognized gap exists and there is ***no*** existing process (local, state, or federal) to fill the gap, the policy process determines whether the state is the appropriate party to perform the role. However, the policy process is not to establish another layer of bureaucracy.

4. New roles for the State identified by the policy process, if any, will not rely upon existing funding and the process enforces the concept that general aviation pays general aviation and commercial services pays for commercial service.

The Aviation Policy Advisory Committee identified gaps in the following areas:

Preservation: Encroachment by incompatible land uses around airports, wetland mitigation, economic role of airports, local designation of airports of statewide significance (for Growth Management purposes) and general aviation airport preservation funding.

Capacity: Air capacity, regional mitigation and adequate surface transportation connections to airports.

Safety: Safety improvements at general aviation airports and the availability/importance of airports in emergency response.

The Aviation Policy process is an important part to preserving our aviation network especially in light of new land use challenges, such as new school development next to airports and new residential development in runway protections zones. I look forward to working with you over the next several months in developing this important policy.

Bill

Medical Now Possible for Diabetics

by Brian A. Holmes, Chief Pilot

For any pilot a denied medical certificate is always a sorrowful event. For a pilot who develops, or a wanna-be pilot who has insulin dependent diabetes, flying was out of the question. Simply put under no circumstances would the FAA authorize the issuance of a medical certificate for an insulin dependent diabetic.

As of December 23, 1996 these folks are back in the running. Yes, there are some extra hoops you have to jump through. Yes, there will be limitations on your operations. But at least you can fly.

For more than ten years the Aircraft Owners & Pilots Association, the American Diabetes Association and others fought for this change. Quite frankly, many expected the FAA to never waiver. Thanks to encouragement from the field, the FAA did begin to listen. Starting in 1992 the FAA started a test program using air traffic control specialists who were insulin dependent. Air traffic control specialists must maintain an 2nd class medical. The program worked quite well and that became the basis for further consideration.

In order to receive a third class (that's all they will issue) medical certificate, you have to go through the "special issuance" protocol for a certificate. Here's how to qualify and apply:

- You must not have any other disqualifying conditions, especially diabetes related complications.
- You must not have no more than one hypoglycemic reaction with loss of consciousness, seizure, impaired cognitive function which occurred without warning systems, or requiring intervention by another party within the past 5 years. One year of stability must follow the episode of hypoglycemia.
- You must be completely reevaluated by a specialist every 3 months with daily glucose measurements provided.
- A digital glucose monitor with memory must be carried in flight.
- Supplies to obtain and measure blood glucose must be carried in flight
- Pilot must carry rapidly absorbable glucose (10 gram portions) in flight.
- Pilots must *document* a blood glucose level of 100-300 mg/dl within one half hour prior to flight, hourly during flight, and within one half hour prior to landing. ■

DME, ILS, VOR, & NDBs to be Phased Out

by Brian A. Holmes, Chief Pilot

The FAA has announced a transition program that will take us from ground based navigation equipment such as VOR's, ILS, & NDBs to space based navigation. The formal transition program is expected to commence around the turn of the century and be complete by the year 2010. For the first five years the FAA will keep all ground based equipment fully functional. Starting about 2005, they would be reduced as the number of users decline and be completely decommissioned around 2010.

The GPS system using 24 satellites in near earth orbit became operational in July 1995. The FAA is still developing the Wide Area Augmentation System which will increase GPS accuracy to the point where it can be used for pinpoint navigation and Category III landings.

Pilots have come to appreciate GPS because it gives them the ability to know their location anywhere they fly. Pilots no longer have to worry about finding a VOR or NDB that can be monitored from the cockpit. The new GPS navigation system offers seven very big benefits for pilots:

1. Precise 4-D (three dimensions + time navigation).
2. Ability to select user-preferred flight paths.
3. Reduced separation standards.
4. Cost savings from phasing out ground-based systems.
5. Lower avionics costs
6. Reduced training costs.
7. Streamlined procedures and navigation techniques.

The year 2010 may seem to be a long time off. But if you are considering purchasing an aircraft, or updating your current avionics stack, you might want to keep this transition in mind.

For those who either don't use GPS or who have not used all of its capabilities, the time to start sharpening your skills is now.

Gee, I wonder how many of us remember the old "radio range" system of navigation? ■

Emergency Locator Transmitter Basics

by Brian A. Holmes, Chief Pilot

Emergency Locator Transmitters (ELTs) have been around the aviation community since the early 1970s. Unfortunately they have had a checkered past and some serious problems along the way. In 1974 Congress mandated most aircraft operating within the US had to have an ELT installed. Pilots and alphabet groups resisted but Federal law mandated the installation.

Early models were powered by Lithium batteries. In the late 1970s. after a series of ELTs exploding an emergency notice was issued to remove the Lithium batteries from the aircraft. Once the battery problem was solved (now most use nicad) ELTs were armed again. Until this decade ELTs remained almost unchanged.

There are still some problems with ELTs in the field. The Aviation Division responded to over 400 non-distress ELTs last year. These are false alarms where units have accidentally been turned on, corrosion has shorted the switch, or the unit just simply failed. Each and every ELT signal must be tracked down, identified, and silenced to ensure there is not a crashed aircraft on the other end.

ELT maintenance used to be pretty simple. Your mechanic would look at the battery expiration date during the annual. If the battery was out of date you had to buy a new one. That was it.

A review of national data (Air Force Rescue Coordination Center) for 1992 shows that the false alarm rate on ELTs is 97%. That means out of every 100 ELT signals in America, 97 are false alarms. Only 3% reflect true emergencies.

Another scary statistic from that same study is the ELT only worked in approximately 25% of the crashes. There was a variety of reasons. For instance, if the aircraft hits the side of the mountain in a high cruise the ELT will not survive. If there is post crash fire, the ELT will burn and cease working. However in most of the cases ELTs do not activate because they are defective; no battery; shorted out; or just simply don't work.

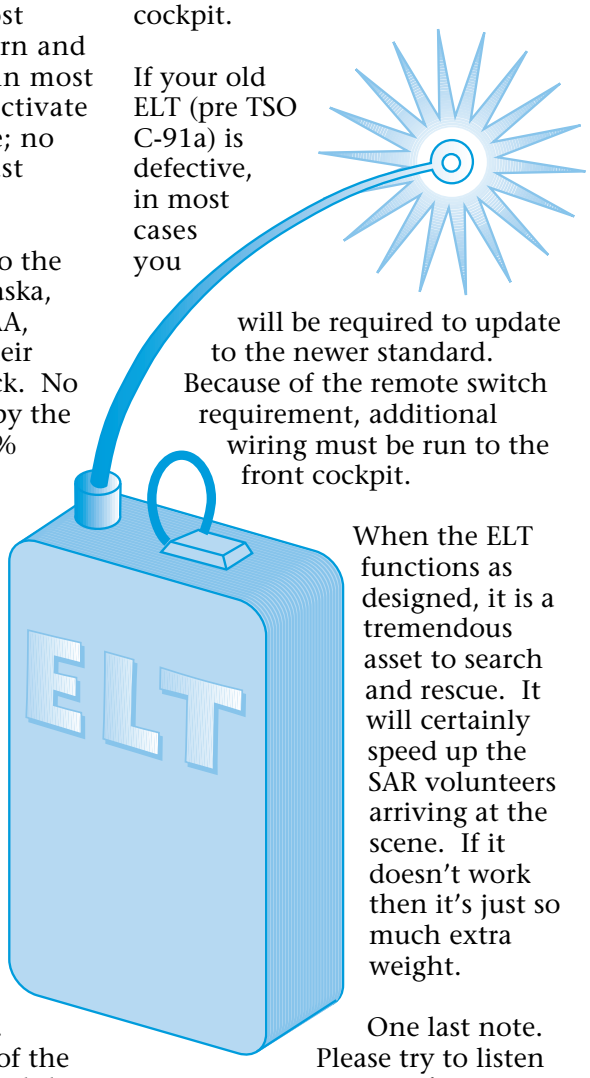
Approximately 10 years ago the Avionics Association of Alaska, in cooperation with the FAA, urged everyone to bring their airplane in for an ELT check. No penalties would be issued by the FAA. The result? Fully 50% of the aircraft tested had defective ELTs.

In an emergency off field landing situation a defective ELT is about as useful as a boat anchor to a drowning man. The problem is we all fly around *believing* that this ELT in the back is the solution. It is an asset only if it works.

Recently the FAA recognized some of these problems. The result is an ELT now must be tested once a year. FAR 91.217 requires a test of the G-switch, the mounting, and the antenna of your ELT. Remember if the ELT is functional it may help save your life. If it is not functional, it is useless.

ELTs installed today must meet new, more stringent requirements as established by TSO C-91a. The newer ELTs have a more stringent frequency tolerance of .005% (to ensure the signal can be heard by one of the SARSAT satellites). Also the G switch must activate with a deceleration of 3.5 feet per second and a stronger heavy duty airframe mount is required. The TSO also mandates a remote switch in the cockpit.

If your old ELT (pre TSO C-91a) is defective, in most cases you will be required to update to the newer standard. Because of the remote switch requirement, additional wiring must be run to the front cockpit.



When the ELT functions as designed, it is a tremendous asset to search and rescue. It will certainly speed up the SAR volunteers arriving at the scene. If it doesn't work then it's just so much extra weight.

One last note. Please try to listen to 121.5 as often as you can. If you hear an ELT, advise either air traffic control or Flight Service. They will pass the word to us. When you shut down after a great flight spend a moment listening to 121.5 to make sure your ELT did not accidentally activate. ■

Oops…

When the last edition of the *COM-NAV Frequencies Guide* was published, two important airports, Renton and Richland, were left out.

We've made this correction so you can paste it into your copy of the Washington, Oregon and Idaho frequency guide. Remember this is the last printing of the popular booklet. Later this year, a new expanded *Pilots Guide to Washington Airports*, will be printed. This new book will have new photos of each airport, as well as all of the radio frequencies you're used to from the COM-NAV booklet, and other important airport information. And in response to your requests, it will sized similar to the COM-NAV booklet and bound to lay flat. ■

RENTON – Renton Municipal ..... RNT

LOCATION	N 47 29.6 W 122 12.9	
ATIS		126.95
TOWER		124.7
TOWER OFF.....	ANNOUNCE ON CTAF	124.7
	GRND	121 .6
APP/DEP.	341-075	119.2
APP/DEP	076-160 RWY 15	119.2
APP/DEP	076-160 RWY 33	125.9
APP/DEP	161-198	126.5
APP/DEP	199-300	120.1
APP/DEP	301-340 RWY 15	125.9
APP/DEP	301-340 RWY 33	120.4
NDB	AT FIELD	353
CL DEL	CLEARANCE DELIVERY	121.6
FSS	SEATTLE	122.5
UNICOM		122.97

RICHLAND – Richland ..... RLD

LOCATION	N 46 18.3 W 119 18.3		
CTAF			122.7
APP/DEP	Chinook APP		128.75
APP/DEP	When Chinook Closed	Seattle ARTCC	132.6
VOR/DME	7.9 nm-269 to Field	PSC	108.4
FSS	Moses Lake RCO		122.4
PCL	Rwy 01/19		122.7

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